REMARKS/ARGUMENTS

Claims 1, 5, 7, 11, and 29 are pending in the current Office Action. Claims 6 and 18 have been canceled.

I. Claim Objections

a. Typographical error in Claim 1.

The typographical error introduced into Claim 1 in the Listing of Claims submitted on 5/13/04 has been corrected by amending the claim to read "complement" instead of "compliment".

b. Substitution of "and" for "or" in Claim 1.

In Claim 1, as suggested by the Office, the word "and" has been substituted for "or".

c. Claim 11 is objected to under 37 CFR 1.75(c)as being an improper dependent

The Applicants have canceled Claim 11.

II. Rejection of Claims 1, 5-7, 11, 18, and 29 under 35 USC §112, first paragraph

Claims 1, 5-7, 11, 18, and 29 stand rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which, according to the Office, was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The rejection of Claim 18 is moot because Claim 18 has been canceled.

The Applicants appreciate the Examiner's careful review of the arguments.

However, the Applicants maintain that the Enablement requirement has been met in the present Office Action.

The Office action states that the specification of the present Application, teaches that SEQ ID:58 was "preferentially observed" in libraries generated from OA patient tissues, but according to the Office, it is unclear what is meant by "preferentially observed". The Office states that the specification does not disclose sufficient data for one to determine what "preferentially observed" might mean. As a result, according to the Office, the relationship between OA and SEQ ID NO:58 is unclear. The Office directs the Applicants attention to page 3, lines 1-12 of the originally filed Application.

Page 3, lines 1-12 of the original Application state that, "The data mining effort used sequence comparison techniques (based on BLAST comparison of individual ESTs) to evaluate which ESTs were **preferentially observed** in the target libraries versus control and/or normal libraries." The Applicants contend that any individual skilled in the art would know how normal or control levels of any substance is determined. One skilled in the art would know that significance levels of any sample size can be determined using appropriate statistical methods, such as the "Student's t test". This statistical method, for example, is widely used and accepted, and readily available to anyone skilled in the art. This is only one analysis of several that can be used.

In addition, the Office states that "no data is presented regarding the relative amounts of SEQ ID NO:58 in OA versus non-OA tissues. The Office adds that this is an important point because in order to use SEQ ID NO:58 as a diagnostic one, one must know what level of expression of SEQ ID NO:58 is diagnostic of OA. The Office calls the Applicants attention to page 9 of the response filed 5/13/04 which states that "preferentially observed means the ability of a first test compound to preferentially bind to a receptor or other biologically active portion of a second compound as compared to a known compound. According to the Office, this response fails to clarify the issue because the Office says that it offers no information regarding the extent to which SEQ ID NO:58 was "preferentially observed" in disease versus control tissues

and therefore, according to the Office, the relationship between OA and SEQ ID NO:58 is not clear.

In response, the Applicants call the Examiner's attention to page 57, lines 8-14 of the originally filed Application which discloses the methods needed for obtaining control values from a control subject. It states: "the methods further involve obtaining a control biological sample from a control subject, contacting the control sample with a compound or agent capable of detecting protein, mRNA, or genomic DNA of the invention, such that the presence of protein, mRNA or genomic DNA is detected in the biological sample, and comparing the presence of protein, mRNA or genomic DNA in the control sample with the presence of protein, mRNA or genomic DNA in the test sample." The Applicants contend that one skilled in the art would know that the significance levels of these control findings would be determined using an appropriate statistical model.

The Office also states that the specification has not established what, if any, amount of SEQ ID NO:58 expression correlates with OA, and what amount is indicative of no disease. The Applicants reiterate that the comparison of control values with those values from OA patients, **along with the appropriate statistical analysis such as determined by the Student's t test,** is all that is required to determine whether levels of SEQ ID NO:58 expression are significantly elevated as compared to levels in non-OA patients.

In addition, while the Applicants believe that enablement has been fulfilled in this Application, they wish to point out to the Examiner that the Claims that are pending in the present Application (Claims 1, 5-7, 11, 18, and 29) are **not method claims** but are compound per se claims, i.e, nucleic acids.

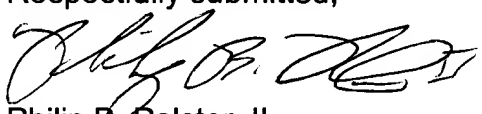
In light of these amendments and responses, the Applicants respectfully request that the current rejections of Claims 1, 5-7, 11, and 29 under 35 USC §112, first paragraph be withdrawn and that the Claims be allowed to issue.

Applicants reserve the right to file divisional Applications directed to the subject matter of the withdrawn Claims.

III. Conclusion

If the Examiner believes a telephonic interview with Applicant's representative would aid in the prosecution of this application, he is cordially invited to contact Applicant's representative at the below listed number.

Respectfully submitted,



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